

Table 1 - Comparison of Criteria for Remediation of Radium 226 Contaminated Soil in Residential Areas

Agency/State	Ra ²²⁶ - Soil Cleanup/Action Concentration (pCi/g)	Superfund Risk Equivalent of Ra ²²⁶ Concentration	Notes
Criteria Discussed in Meetings with Florida			
EPA Superfund - Cleanup OSWER Directive. 9200.4-25	5 5	4×10^{-4} 4×10^{-4}	UMTRCA is routinely applied as an ARAR. UMTRCA standard is 5 pCi/g from surface to 15 cm below surface; 15 pCi/g for each increment of 15 cm below surface. OSWER Directive explains how subsurface level of 15 pCi/g is RAR only when it will get to 5 pCi/g.
ATSDR	0.7 3.3	5×10^{-5} 3×10^{-4}	ATSDR interpretation of NCRP 116. Recommend actions to protect few individuals above 500 mrem/yr and 100 mrem/yr for larger populations. ATSDR would use 100 mrem/yr recommendation for Florida phosphate site. Soil concentrations are based on Screening Levels in NCRP 129 which ATSDR indicated they would use in November 2004 meeting with U.S. EPA and Florida. ATSDR values include risk consideration from radon intrusion into homes.
Florida, Proposal for Phosphate Lands	85 17	7×10^{-3} 1×10^{-3}	Florida DOH interpretation of NCRP 116. Take action when radium levels correspond to greater than 500 mrem/yr (85 pCi/g). Unsure if this would be the cleanup level. Education and possible action by homeowner between 500 and 100 mrem/yr (17 pCi/g). Below 100 mrem/yr no action. Soil concentrations are based previous run by Florida using DOE Resrad model which Florida indicated they would employ at the phosphate sites.

